

U.S. Embassy
686 Old Bagamoyo Road
Dar Es Salaam, Tanzania

3 April, 2015.

REQUEST FOR QUOTATION for **PR4207435 NEC Electrical Switchgear Service/Maintenance Contract (BME).**

Dear Vendor,

The Embassy of the United States of America invites you to submit your quotation for the services shown below in a Scope of work.

Your quotation must be submitted by **1100 hours local time on Wednesday 22 April, 2015.**

If you send a paper quotation (on which our PR4207435 is clearly stated), it must be in a sealed envelope marked as follow.

GSO-U.S EMBASSY CONTRACTING OFFICER

Quotation Enclosed

PR 4155118 for Service and Maintenances of Building Elevator.

686 Old Bagamoyo Road Msasani,

Dar es salaam, Tanzania.

The electronic address for submission is darprocurementbid@state.gov.

- On the e-mail subject line, state that the submission is for **PR4207435 NEC Electrical Switchgear Service/Maintenance Contract.**
- On your attached quotation, state that the quotation is for **PR4207435 NEC Electrical Switchgear Service/Maintenance Contract.**

The US Government intends to purchase the lowest priced technically acceptable product or service.

All vendors receiving awards over \$25,000 must be registered in the System for Award Management (SAM). When submitting your bids, write your SAM Registration information directly and clearly on your quotation.

We encourage all vendors which may bid either on this solicitation or in the future to start now and complete the SAM registration process. Registration will make the award process move much more smoothly and quickly. The registration process is not difficult, provided all instructions are followed carefully. Please see our Embassy Contract Opportunities web page for details or call us if you have questions

Any questions regarding this Request for Quotation must be directed to the Contracting Officer +255-22-229-4121 during office hours.

Sincerely,

The Contracting Officer

**Preventive Maintenance Contract
Scope of Work
For
Electrical Switchgear**

**United States Embassy
Dar es Salaam
2016**

**United States Department of State
OVERSEAS BUILDING OPERATIONS**

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SECTION 1 - THE SCHEDULE

1.0 DESCRIPTION

The American Embassy in **Dar es Salaam** requires preventive maintenance services on the facility's main service electrical distribution switchgear. These services shall result in all systems being serviced under this agreement being in good operational condition when activated.

1.1. TYPE OF CONTRACT

This is a firm fixed price contract. Prices for all Contract Line Item Numbers (CLIN) shall include proper disposal of toxic substances as per Item 8.4 where applicable. No additional sums will be payable for

any escalation in the cost of materials, equipment or labor, or because of the contractor's failure to properly estimate or accurately predict the cost or difficulty of achieving the results required. The contract price will not be adjusted due to fluctuations in currency exchange rates.

1.2. PERIOD OF PERFORMANCE

The contract will be for a period of one-year, with a maximum of four one-year optional periods of performance and will be expected to commence no later than (DATE).

2.0 PRICING

The rates below include all costs associated with providing preventive maintenance services in accordance with the attached scope of work, and the manufacturer's warranty including materials, labor, insurance (see FAR 52.228-4 and 52.228-5), overhead, profit and GST (if applicable).

2.1. Base Year. The Contractor shall provide the services shown below for the base period of the contract and continuing for a period of 12 months.

CLIN	Description	Quantity of Equipment	Type of services	No. of service	Unit price / service (\$)	Total per year (\$)
001	Main Switchgear – SWG1	1	Initial Check	1		
002	Double ended Switchgear – SWG2	1	Initial Check	1		
003	Auto Transfer Switch	2	Initial Check	1		
	Total Base Year					

2.2. Option Year 1. The Contractor shall provide the services shown below for Option Year 1 of the contract, and continuing for a period of 12 months.

CLIN	Description	Quantity of Equipment	Type of services	No. of service	Unit price / service (\$)	Total per year (\$)
101	Main Switchgear – SWG1	1	3-5 year check	1		
102	Double ended Switchgear – SWG2	1	3-5 Year check			
103	Auto Transfer Switch	2	3-5 Year check			
	Total Option Year 1					

2.6. Total for all years:	Initial Service	\$ _____
	Option Year 1	\$ _____
	TOTAL	\$ _____

2.7 Repair option. Repairs are NOT included under this agreement (see 7.1.3) and are to be done outside this contract. However, we would like to have current labor rates in the event that there is an issue discovered during the preventive maintenance of the specified equipment. Please provide your current labor rates in the Repair Option fields below. As stated in 7.1.3 any necessary repairs or parts will be submitted for approval and then billed against a separate PO. The Contractor is not approved to do any additional work without approval.

Repair Labor Rates	
Initial Service	\$ _____/hr
Option Year 1	\$ _____/hr

3.0 NOTICE TO PROCEED

After Contract award and submission of acceptable insurance certificates and copies of all applicable licenses and permits, the Contracting Officer will issue a Notice to Proceed. The Notice to Proceed will establish a date (a minimum of ten (10) days from date of Contract award unless the Contractor agrees to an earlier date) on which performance shall start.

DESCRIPTION/SPECIFICATION/WORK STATEMENT

4.0 EQUIPMENT AND PERFORMANCE REQUIREMENTS

4.1. The American Embassy in Dar es Salaam requires the Contractor to maintain the following systems in a safe, reliable and efficient operating condition. Please see equipment list included in Exhibit A for a more detailed description.

1) Equipment Description

4.2. The Contractor shall provide all necessary managerial, administrative and direct labor personnel, as well as all transportation, equipment, tools, supplies and materials required to perform inspection, maintenance, and component replacement as required to maintain the systems in accordance with this work statement. Under this Contract the Contractor shall provide:

- The services of trained and qualified technicians to inspect, adjust, and perform scheduled preventive maintenance.

4.3. Performance Standards

It is expected that all aspect this SOW will be completed. Work will result in the system being in good working condition upon reactivation. All deliverables shall be completed on time under this agreement.

5.0 HOURS OF PERFORMANCE

5.1. The Contractor shall maintain work schedules. The schedules shall take into consideration the hours that the staff can effectively perform their services without placing a burden on the security personnel of the Post. The Contractor shall deliver standard services between the hours of 07:30 AM and 21:00 PM Monday through Thursday. No work shall be performed on US Government. Below is a list of the holidays.

Jan 01	New Year's Day	US
Jan	Birthday of Martin Luther King, Jr.	US
Feb	President's Day	US
May	Memorial Day	US
Jul 04	Independence Day	US
Sep	Labor Day	US
Oct 08	Columbus Day	US
Nov 11	Veterans Day	US
Nov 22	Thanksgiving Day	US
Dec 25	Christmas	US

6.0 ACCESS TO GOVERNMENT BUILDINGS AND STANDARDS OF CONDUCT

6.1 General. The Contractor shall designate a representative who shall supervise the Contractor's technicians and be the Contractor's liaison with the American Embassy. The Contractor's employees shall be on-site only for contractual duties and not for any other business or purpose. Contractor employees shall have access to the equipment and equipment areas and will be escorted by Embassy personnel.

6.2 Personnel Security. The Government reserves the right to deny access to U.S.-owned and U.S.-operated facilities to any individual. The Contractor shall provide the names, biographic data and police clearance on all Contractor personnel who shall be used on this Contract prior to their utilization. Submission of information shall be made within 5 days of award of contract. **No technician will be allowed on site without prior authorization. Note: this may include cleared personnel if advance notice of visit is not given at least one week before the scheduled visit.**

6.2.1 Vehicles. Contractor vehicles will not be permitted inside the embassy compound without prior approval. If you need to have vehicle access please submit your vehicle information (Make, Model, License Plate #) along with a written justification as to why access is necessary. This should be submitted to the Facility Manager at least one (1) week prior to the visit.

6.2.1 Government shall issue identity cards to Contractor personnel, after they are approved. Contractor personnel shall display identity card(s) on the uniform at all times while providing services

under this contract. These identity cards are the property of the US Government. The Contractor is responsible for their return at the end of the contract, when an employee leaves Contractor service, or at the request of the Government. The Government reserves the right to deny access to U.S.-owned and U.S.-operated facilities to any individual.

6.3 Security Clearances. All Work under this contractor that are designated as non-CAA areas may be performed by un-cleared American or local workers. However, all work done in CAA and PCC areas shall be performed by cleared American Construction personnel as needed to complete the services. The Contractor shall work closely with the COR, the Post Facility Manager [FM] or the General Services Officer [GSO].

6.3.1 The Contractor must comply with all of the following requirements relating to the protection of U.S. Embassy in Dar es Salaam, Tanzania Diplomatic personnel, property and compound project information and cooperate fully in all security matters Sensitive but Unclassified (SBU) and information that may arise relating to this contract.

Contractor personnel may also be exposed to various documents and signs, including Post notices, event schedules, DOS regulations and conversations or announcements relating to the operation of the U. S. Embassy Dar es Salaam and diplomatic personnel. This information should not be shared with anyone not employed by or falling under the protection of the Embassy.

Contractor personnel may be exposed to various documents, such as blueprints, drawings, sketches, notes, surveys, reports, photographs, and specifications, received or generated in conjunction with this contract. These documents contain information associated with diplomatic facilities for the U.S. Department of State. These documents have been marked with the handling designations "Unclassified" or "Sensitive but Unclassified" and US Government warnings against reproduction and distribution. These documents require special handling and dissemination restrictions. All handling designations and warnings on original documents must be reproduced on subsequent copies.

The loss, compromise, or suspected compromise or loss of any SBU information, contract related information (personnel files, payroll information, etc.), any post or diplomatic facility related information (documents, notes, drawings, sketches, surveys, reports, exposed film, negatives, or photographs), or ANY information which may adversely affect the security interests of the United States, must be immediately brought to the attention of the Contracting Officer (CO) and Contracting Officer's Representative (COR).

Photographs of any diplomatic overseas building or facility must be authorized in advance by the COR and Regional Security Officer (RSO), who will establish any controls, limits, and/or restrictions as necessary. Exposed film depicting any Controlled Access Area and/or sensitive equipment must be developed in a U.S. controlled environment by appropriately cleared personnel. No further dissemination, publication, duplication, or other use beyond that which was requested and approved is authorized without specific, advance approval from DS. DS reserves the right to demand retention of all copies of said photographs and/or negatives, following fulfillment of the previously authorized usage.

Transmission of any information marked Sensitive but Unclassified (SBU) or contract/personnel sensitive information, via the Internet, is prohibited. SBU information can be transmitted via ProjNet, mail, FedEx (or other commercial carrier) or fax, or hand carried by authorized contractor personnel.

Discussion of U.S. Diplomatic post activities while not on post, to include in homes, hotel rooms, restaurants and all other public places, is prohibited. Any contact with host or third country nationals that seems suspicious (such as undue curiosity in the project or project personnel) shall be reported immediately to the COR and RSO.

The Contractor and its employees shall exercise utmost discretion in regard to all matters relating to their duties and functions. They shall not communicate to any person any information known to them by reason of their performance of services under this contract which has not been made public, except to the extent necessary to perform their required duties in the performance of the contract requirements or as provided by written authorization of the Contracting Officer. All documents and records (including photographs) generated during the performance of work under this contract shall be for sole use of and shall become the exclusive property of the U.S. Government. No article, book, pamphlet, recording, broadcast, speech, television appearance, film or photograph concerning any aspect of the work performed under this contract shall be published or disseminated through any media, to include company or personal websites, without the prior written authorization of the Contracting Officer. These obligations do not cease upon the expiration or termination of this contract or at any other point in time. The Contract shall include the substance of this provision in all subcontracts hereunder.

6.4 Standards of Conduct

6.4.1 General. The Contractor shall maintain satisfactory standards of employee competency conduct cleanliness, appearance, and integrity and shall be responsible for taking such disciplinary action with respect to employees as may be necessary. Each Contractor employee shall adhere to standards of conduct that reflect credit on themselves, their employer, and the United States Government. The Government reserves the right to direct the Contractor to remove an employee from the worksite for failure to comply with the standards of conduct. The Contractor shall immediately replace such an employee to maintain continuity of services at no additional cost to the Government.

6.4.2 Uniforms and Personal Equipment. The Contractor's employees shall wear clean, neat and complete uniforms when on duty. All employees shall wear uniforms approved by the Contracting Officer's Representative (COR). The Contractor shall provide, to each employee and supervisor, uniforms and personal equipment. The Contractor shall be responsible for the cost of purchasing, cleaning, pressing, and repair of the uniforms.

6.4.3 Neglect of Duties. Neglect of duties shall not be condoned. This includes sleeping while on duty, unreasonable delays or failures to carry out assigned tasks, conducting personal affairs during duty hours and refusing to render assistance or cooperate in upholding the integrity of the worksite security.

6.4.4 Disorderly Conduct. The Contractor shall not condone disorderly conduct, use of abusive or offensive language, quarreling, and intimidation by words, actions, or fighting. Also included is participation in disruptive activities that interfere with normal and efficient Government operations.

6.4.5 Intoxicants and Narcotics. The Contractor shall not allow its employees while on duty to possess, sell, consume, or be under the influence of intoxicants, drugs or substances which produce similar effects.

6.4.6 Criminal Actions. Contractor employees may be subject to criminal actions as allowed by law in certain circumstances. These circumstances include but are not limited to the following actions: falsification or unlawful concealment, removal, mutilation, or destruction of any official documents or records or concealment of material facts by willful omission from official documents or records; unauthorized use of Government property, theft, vandalism, or immoral conduct; unethical or improper use of official authority or credentials; security violations; organizing or participating in gambling in any form; and misuse of weapons.

6.4.7 Key Control. The Contractor **will not** be issued any keys. The keys will be checked out from Post 1 by a "Cleared American" escort on the day of service requirements.

6.4.8 Notice to the Government of Labor Disputes. The Contractor shall inform the COR of any actual or potential labor dispute that is delaying or threatening to delay the timely performance of this contract.

7.0 SCHEDULED PREVENTIVE MAINTENANCE

7.1. General

7.1.1. The Contractor shall perform preventive maintenance as outlined in Exhibit A - STATEMENT OF WORK. The objective of scheduled preventive maintenance is to eliminate system malfunction, breakdown and deterioration when units are activated/running.

7.1.2. The Contractor shall inventory, supply and replace expendable parts (eg, filters, belts, hoses, gaskets) that have become worn down due to wear and tear. The Contractor shall maintain a supply of expendable and common parts on site so that these are readily available for normal maintenance to include: hoses, belts, oil, chemicals, coolant, filters (Air, Fuel, Oil), grease, sealant, thermostat, fuses; in addition to the appropriate tools, testing equipment, safety shoes and apparel for technicians, personal protective equipment (hands, hearing, eye protection), MSDS, cleaning material and oil spill containment kits. The contractor should inventory the supply after each visit and order replacement supplies and have them delivered on site.

7.1.3. Exclusion. This contract does NOT include repair of equipment and replacement of hardware (e.g. bearings, pistons, piston rings, crankshaft, and gears.) **Hardware replacements will be separately priced out by the Contractor for the Government's approval and acceptance.** The Government has the option to accept or reject the Contractor's quote for parts and reserves the right to obtain similar spare parts from other competitive sources. If required by the Government, the Contractor shall utilize Government-purchased spare parts, if awarded the work. Such repairs/replacements will be accomplished by a separate purchase order. However, this exclusion does not apply if the repair is to correct damage caused by Contractor negligence.

7.1.4. Replacement/repair of any electronic or electrical parts must be approved by the COR prior to installation of the part. If the Contractor proceeds to replace any electronic or electrical parts without COR approval, the Contractor shall de-install the parts at no cost to the Government.

7.2 Checklist Approval

The Contractor shall submit to the COR a schedule and description of preventive maintenance tasks which the Contractor plans to provide. The contractor shall customize a work sheet to match the equipment or use a factory supplied one outlining the sequence of events and tasks to be performed. The Contractor shall prepare this schedule, work sheet, and task description in a checklist format for the COR's approval prior to contract work commencement.

7.2.1. The Contractor shall provide trained technicians to perform the service at frequencies stated in Exhibit A and on the equipment called out in this SOW. The technician shall sign off on every item of the checklist and leave a copy of this signed checklist with the COR or the COR's designate after the maintenance visit.

7.2.2. It is the responsibility of the Contractor to perform all manufacturers' recommended preventive maintenance as well as preventive maintenance recommended by the manufacture technical manuals for the respective equipment.

8.0 PERSONNEL, TOOLS, CONSUMABLE MATERIALS AND SUPPLIES

The Contractor shall provide trained technicians with the appropriate tools and testing equipment for scheduled maintenance, safety inspection, and safety testing as required by this Contract. The Contractor shall provide all of the necessary materials and supplies to maintain, service, inspect and test all the systems to be maintained.

8.1 Contractor furnished materials will include but not limited to appropriate tools, testing equipment, safety shoes and apparel for technicians, hands, hearing and eye protection, MSDS, cleaning material and oil spill containment kit.

8.2 Repairs. Repairs are not included in this contract. See Item 7.1.3. Exclusions.

8.3 Disposal of used oil, fuel, battery and other toxic substances. The Contractor is responsible for proper disposal of toxic/hazardous substances. All material shall be disposed of according to Government and Local law. After proper disposal the contractor must show proof of authorized disposal of these toxic/hazardous substances.

9.0 Test and inspection field report: The contractor shall provide one copy of a typed summary report within 30 days of site work statement completion. The report must be written in the English language. At a minimum the report must include:

- Provide a narrative summary site report to include all findings, repairs or corrective measures, completed inspection/testing checklists.
- Provide a detailed report noting any noted discrepancy; include photos of the problem and a narrative summary of the corrective action required. The repair action will be contracted separately.
- Provide a Bill of Materials (BOM) as necessary for any required repair parts for future corrective action or repair. The BOM must note component name, part #, vendor or source, approximate lead time, suggested retail price.
- Provide a separate Bill of Materials (BOM) as necessary for any recommended spare parts for system. This can include applicable electrical safety PPE that post does not have onsite.

- Detail report covering all aspects of equipment upgrading, system modification, new part installation in all locations.
- Provide a “marked-up” as-build drawing as necessary to indicate any modifications or differences found during inspection.
- In the final report list any Locally Employed Staff that assisted in this planned maintenance action. This is not a training requirement, but rather to document the personnel involved in the work.

10. DELIVERABLES

The following items shall be delivered under this contract:

Description	QTY	Delivery Date	Deliver to
Names, biographic data, police clearance on Contractor personnel (#6.2)	1	5 days after contract award	COR
Certificate of Insurance (#10.2)	1	10 days after contract award	COR
Checklist and work sheet (7.2)	1	Prior to commencement of work	COR
Checklist signed by Contractor’s employee (#7.2.1)	1	After completion of each maintenance service	COR
Test and Inspection Field Report (#9.0)	1	30 days after each completion of service	COR
Invoice (#15)	1	After completion of each maintenance service	COR

11.0 INSURANCE REQUIREMENTS

11.1 Personal Injury, Property Loss or Damage (Liability). The Contractor assumes absolute responsibility and liability for any and all personal injuries or death and property damage or losses suffered due to negligence of the Contractor’s personnel in the performance of this Contract

The Contractor’s assumption of absolute liability is independent of any insurance policies.

11.2 Insurance. The Contractor, at its own expense, shall provide and maintain during the entire period of performance of this Contract, whatever insurance is legally necessary. The **Contractor shall carry the following minimum insurance:**

Public Liability Insurance

Bodily Injury	\$..... per occurrence	\$..... Cumulative
Property Damage	\$..... per occurrence	\$..... Cumulative

Workers’ Compensation and Employer’s Liability

11.3 Worker’s Compensation Insurance. The Contractor agrees to provide all employees with worker’s compensation benefits as required under local laws (see FAR 52.228-4 “Worker’s Compensation and War-Hazard Insurance Overseas”).

12.0 LOCAL LAW REGISTRATION

If the local law or decree requires that one or both parties to the contract register the contract with the designated authorities to insure compliance with this law or decree, the entire burden of this registration shall rest upon the Contractor. Any local or other taxes which may be assessed against the Contract shall be payable by the Contractor without Government reimbursement.

13.0 QUALITY ASSURANCE PLAN (QAP).

13.1 Plan. This plan is designed to provide an effective surveillance method to promote effective Contractor performance. The QAP provides a method for the Contracting Officer's Representative (COR) to monitor Contractor performance, advise the Contractor of unsatisfactory performance, and notify the Contracting Officer of continued unsatisfactory performance. The Contractor, not the Government, is responsible for management and quality control to meet the terms of the Contract. The role of the Government is to conduct quality assurance to ensure that Contract standards are achieved.

Performance Objective	PWS Para	Performance Threshold
<u>Services.</u> Performs all services set forth in the performance work statement (PWS)	1 thru 12	All required services are performed and no more than one (1) customer complaint is received per month

13.2 Surveillance. The COR will receive and document all complaints from Government personnel regarding the services provided. If appropriate, the COR will send the complaints to the Contractor for corrective action.

13.3 Standard. The performance standard is that the Government receives no more than one (1) customer complaint per month. The COR shall notify the Contracting Officer of the complaints so that the Contracting Officer may take appropriate action to enforce the inspection clause (FAR 52.212-4, Contract Terms and Conditions-Commercial Items), if any of the services exceed the standard.

13.4. Procedures.

13.4.1 If any Government personnel observe unacceptable services, either incomplete work or required services not being performed, they should immediately contact the COR.

13.4.2 The COR will complete appropriate documentation to record the complaint.

13.4.3 If the COR determines the complaint is invalid, the COR will advise the complainant. The COR will retain the annotated copy of the written complaint for his/her files.

13.4.4 If the COR determines the complaint is valid, the COR will inform the Contractor and give the Contractor additional time to correct the defect, if additional time is available. The COR shall determine how much time is reasonable.

13.4.5 The COR shall, as a minimum, orally notify the Contractor of any valid complaints.

13.4.6 If the Contractor disagrees with the complaint after investigation of the site and challenges the validity of the complaint, the Contractor will notify the COR. The COR will review the matter to determine the validity of the complaint.

13.4.7 The COR will consider complaints as resolved unless notified otherwise by the complainant.

13.4.8. Repeat customer complaints are not permitted for any services. If a repeat customer complaint is received for the same deficiency during the service period, the COR will contact the Contracting Officer for appropriate action under the Inspection clause.

14. TRANSITIONS/CONTACTS

Within 10 days after contract award, the Contracting Officer may ask the contractor to develop a plan for preparing the contractor to assume all responsibilities for preventive maintenance services. The plan shall establish the projected period for completion of all clearances of contractor personnel, and the projected start date for performance of all services required under this contract. The plan shall assign priority to the selection of all supervisors to be used under the contract.

14.1 On site contact. The following are the designated contact personnel between the US Embassy and the Contractor

-Facility Manager: John Rexford; Rexfordjf@state.gov
-Technical Specialist: Shabir Nasser; Nassersh@state.gov

15. SUBMISSION OF INVOICES

The Contractor shall submit an invoice after each preventive maintenance service has been performed. Invoices must be accompanied by a signed copy of the Maintenance Checklist for the work performed including parts replacement and break down calls, if any. No invoice for preventive maintenance services will be considered for payment unless accompanied by the relevant documentation.

The Contractor should expect payment 30 days after completion of service or 30 days after receipt of invoice at the Embassy's payment office, whichever is later. Invoices shall be sent to:

American Embassy
Attention: Invoice Examiner
Budget and Fiscal Office
P.O. Box 9123
DAR ES SALAAM.
darbfvouch@state.gov

Exhibit A - - STATEMENT OF WORK

I. GENERAL INFORMATION:

The United States Embassy in Dar es Salaam requires professional services and contractor cost proposals to perform preventive maintenance services on the facility's Electrical Switchgear.

II. PROJECT REQUIREMENTS:

DESCRIPTION OF EQUIPMENT *:

**Please see attachment at the end of this sheet for more details*

- 1) Main switchgear-415 Volts 3phase+N 50Hz indoor Switchgear, GE – AKD 10 switchgear
- 2) Double ended switchgear-415 Volts 3phase+N 50Hz indoor Switchgear, GE – AKD 10 switchgear
- 3) Automatic Transfer Switch 3000A/3P – Zenith – 2each

III. GENERAL REQUIREMENTS:

The Contractor under this SOW will be responsible for labor, tools, and materials required to carry out all preventive maintenance as outlined in this SOW. Embassy staff has service manuals for all Electrical Switchgear on site.

IV. SCOPE OF WORK - - ELECTRICAL SWITCHGEAR PREVENTIVE MAINTENANCE

Contractor shall provide all materials, supervision, labor, tools and equipment to perform preventive maintenance. This must include, but not limited to, batteries for the trip units, fuses, and dielectric lubricant.

All personnel working in the vicinity shall wear and /or use safety protection while all work is performed. Strict adherence to NFPA70-E and applicable OSHA standards must be maintained at all times. Regular safety meetings shall be held among on-site contractor personnel, LES staff assisting. Any questions or injuries shall be brought to the attention of the Post Occupation Safety and Health Officer (POSHO). Material Safety Data Sheets (MSDS) shall be provided by the Contractor for all HAZMAT materials. Copies will be provided to the COR for approval.

Prior to beginning any site work the contractor must submit to the embassy FM an isolation Standard Operating Procedure (SOP) and schedule to reflect the planned work and sequence. The contractor must obtain written approval from the embassy Facility Manager noting the planned servicing schedule, and all required generator transfers, tie-breaker switching, or switchgear outages.

If any discrepancies are found with the generator system that are not covered under this scope of work then the contractor must provide the following:

1. Detailed report noting the discrepancy found.
2. Bill of Materials (BOM) to include component name, quantity, part #, and price for any repair material required and material lead time.
3. Price quote for repair labor.

At a minimum, the following work must be done:

Task Description

A. Step-One, Visual Inspection:

- 1) Visual and Mechanical Inspection to insure the proper operation of all factory and vender installed meters, breakers, remote power monitoring equipment associated with the switch gear.
- 2) Inspect physical, electrical, and mechanical condition including evidence of moisture or corona.
- 3) Inspect that all filters are in place, and the vents are clear.
- 4) Inspect that the working space is maintained in front of all the electrical gear per the National Electrical Code (NEC) requirements.
- 5) Inspect that the electrical room is free from foreign articles not associated with the room.

B. Step-Two, Verify:

- 1) Compare the installed metering measurements with voltage and power readings from a True RMS meter. Make calibration corrections as necessary to ensure accurate voltage and power readings.
- 2) Verify the switchgear circuit breakers sizing match the drawings.
- 3) Verify the proper labeling of all the breakers in the switchgear.
- 4) Verify that the Post as-build drawings (electrical one-line) match the switchgear distribution. Make "Red Ink" corrections on a paper copy as necessary. Inform the FM of any discrepancies or changes to the drawings.
- 5) Verify that the required NFPA70-E safety equipment is available and in good condition for local staff to use.
- 6) Refer to the manufactures recommendations for additional maintenance requirements.

C. Step-Three, Test/Clean/Correct:

- 1) Inspect anchorage, alignment, grounding for the equipment.
- 2) Test the system earth ground (25 ohms or less).
- 3) Perform infrared testing on all conductor connections, buss terminations. Only record hot spots on digital format for review.
- 4) Before shutdown insure that all components are operational. Record ones that are not at this time. Make the FM aware of all components that are not functioning prior to shut down.
- 5) Schedule power outage of equipment for cleaning. Coordinate any required outage with post. (Outage may require off hours work).
- 6) As applicable perform function tests on "rack-out" breakers, test trip units and settings. Replace any faulty battery, fuse, or switch.
- 7) Perform proper Lock-out/Tag-out and ensure the system is de-energized before removing panel covers and exposing any electrical bus or cabling. Under no circumstances should the equipment be energized during the maintenance operation.
- 8) Clean each compartment. Check for damage, excessive wear, or corrosion
- 9) Spot check and correct any loose components or connections.
- 10) Torque loose connections identified during the infrared test or during inspection.
- 11) Confirm correct operation and sequencing of electrical and mechanical interlock systems.

- 12) Use appropriate dielectric lubrication on moving current-carrying parts and on moving and sliding surfaces.
- 13) Correct any faulty, damaged, discolored, and worn components using site spares.
- 14) Exercise all active components. This includes racking the breakers out than back in.
- 15) Inspect mechanical indicating devices for correct operation.
- 16) Inspect all power control transformers for physical damage, cracked insulation, broken leads, tightness of connections, defective wiring, proper overload protection, and over all general wiring.
- 17) After re-energizing the equipment ensure that all components are up and functioning properly.
- 18) Refer to the manufactures suggested recommendations for additional maintenance requirements.
- 19) Clean or replace any air filters present.
 - 20) Make calibration corrections as necessary to ensure accurate voltage and power readings on permanently installed switchgear metering.
- 21) Equipment List:

Equipment	Manufacturer	Make	Specifications	Location
Main Switchgear-SWG 1	GE	AKD 10	3x 3200 breakers	Utility Building
3200Amps with Wave Pro			1x 800 breaker	
Low voltage Power				
Circuit Breakers				
Double ended Switchgear-SWG2	GE	AKD 10	4x3200 breakers	Utility Building
3200Amps with Wave Pro			14x 800 breakers	
Low voltage Power			1x1600 breaker	
Circuit Breakers				
Automatic Transfer Switch	Zenith	ZTSL 300EC-93	3000Amps; 3pole	Utility Building
Quantity - 2each				

END OF STATEMENT OF WORK